

☒ Accompanying this amendment is the appropriate fee of \$65.00 pursuant to 37 C.F.R. §1.17(c) and 37 C.F.R. §1.136(a).

☐ The Commissioner is hereby authorized to charge the appropriate fee of \$ pursuant to 37 C.F.R. §1.17(c) and 37 C.F.R. §1.136(a) and any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-0502.

☒ The Commissioner is hereby also authorized to charge any fees which may be required during the pendency of this application, including any patent application processing fees under 37 C.F.R. 1.17, and any filing fees under 37 C.F.R. 1.16, including presentation of extra claims, or credit any overpayment to Deposit Account No: 06-0502.

Please amend the above-entitled application as follows:

LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

Claims 1-41 (Cancelled)

42. (Previously presented) A method of eliciting an immune response in a living being with a vaccine which induces protective immunity to one or more infectious diseases when administered, comprising:

a) providing a therapeutic amount of a product comprising a type 1-cellular mediated immune-response eliciting vaccine for injection of the product into a living being to protect against infectious diseases caused by intracellular infection germs, wherein said vaccine comprises:

a DNA expression construct configured to operate in eukaryotic cells;

said expression construct comprising a covalently closed, linear, dumbbell-shaped deoxyribonucleic acid molecule;

said deoxyribonucleic acid molecule comprising a linear double-stranded region;

said double-stranded region comprising single strands being linked by a short, single-stranded loop consisting of deoxyribonucleic acid nucleotides;

said double-strand forming single strands comprising a terminator sequence; and

a coding sequence for one or more antigens under the control of a promoter that is configured to be operable in the living being to be vaccinated; and

at least one oligopeptide, and

said DNA expression construct being covalently linked to said at least one oligopeptide to increase transfection efficacy, and wherein said DNA construct encodes a hepatitis antigen, wherein the oligopeptide is of a length of five to 25 amino acids and at least half of the amino acids are a member of the group consisting of lysine and arginine, and

b) injecting the therapeutic amount of the product intradermally into the living being.

43. (Previously presented) A method of eliciting an immune response in a living being with a vaccine which induces protective immunity to one or more infectious diseases when administered, comprising:

a) providing a therapeutic amount of a product comprising a type 1-cellular mediated immune-response eliciting vaccine for injection of the product into a living being to protect against infectious diseases caused by intracellular infection germs; wherein said type-1 cellular-mediated-immune-response-eliciting vaccine comprises:

a DNA expression construct configured to operate in eukaryotic cells;

said expression construct comprising a covalently closed, linear, dumbbell-shaped deoxyribonucleic acid molecule;

said deoxyribonucleic acid molecule comprising a linear double-stranded region;

said double-stranded region comprising single strands being linked by a short, single-stranded loop consisting of deoxyribonucleic acid nucleotides;

said double-strand forming single strands comprising a terminator sequence; and

a coding sequence for one or more antigens under the control of a promoter that is configured to be operable in the living being to be vaccinated; and

at least one oligopeptide, and

said DNA expression construct being covalently linked to said at least one oligopeptide to increase transfection efficacy, and wherein said DNA construct encodes a hepatitis antigen; said oligopeptide consisting of SEQ ID NO. 3, and

b) injecting the therapeutic amount of the product intradermally into the living being.

44. (Previously presented) A method of eliciting an immune response in a living being with a vaccine which induces protective immunity to one or more infectious diseases when administered, comprising:

a) administering a therapeutic amount of a product comprising a type 1-cellular mediated immune-response eliciting vaccine by injecting the product into a living being to protect against infectious diseases caused by intracellular infection germs; wherein said type-1 cellular-mediated-immune-response-eliciting vaccine comprises:

a DNA expression construct configured to operate in eukaryotic cells;

said expression construct comprising a covalently closed, linear, dumbbell-shaped deoxyribonucleic acid molecule;

said deoxyribonucleic acid molecule comprising a linear double-stranded region;

said double-stranded region comprising single strands being linked by a short, single-stranded loop consisting of deoxyribonucleic acid nucleotides;

said double-strand forming single strands comprising a terminator sequence; and

a coding sequence for one or more antigens under the control of a promoter that is configured to be operable in the living being to be vaccinated; and

at least one oligopeptide consisting of SEQ ID No. 4, wherein said DNA expression construct is covalently linked to said at least one oligopeptide to increase transfection efficacy, and wherein said DNA construct encodes a hepatitis antigen.